

REMARKS

This amendment is in response to the non-final Office Action of September 10, 2003. The specification has been amended to correct a minor error. No new matter is believed to be added to the application by this amendment.

Status of the Claims

Claims 1-4, and 6-28 are pending in the application. Support for the amendments to claim 1 can be found in Fig. 4E and at page 10 of the specification. Support for the amendments to claims 10 and 26 can be found in Fig 3A and at page 8 of the specification. Claims 8, 13, 19 and 25 have been amended to improve their language without reducing their scope. Claims 27 and 28 find support in Figures 3 and 4.

Rejection under 35 U.S.C. 102(e) over Izumi

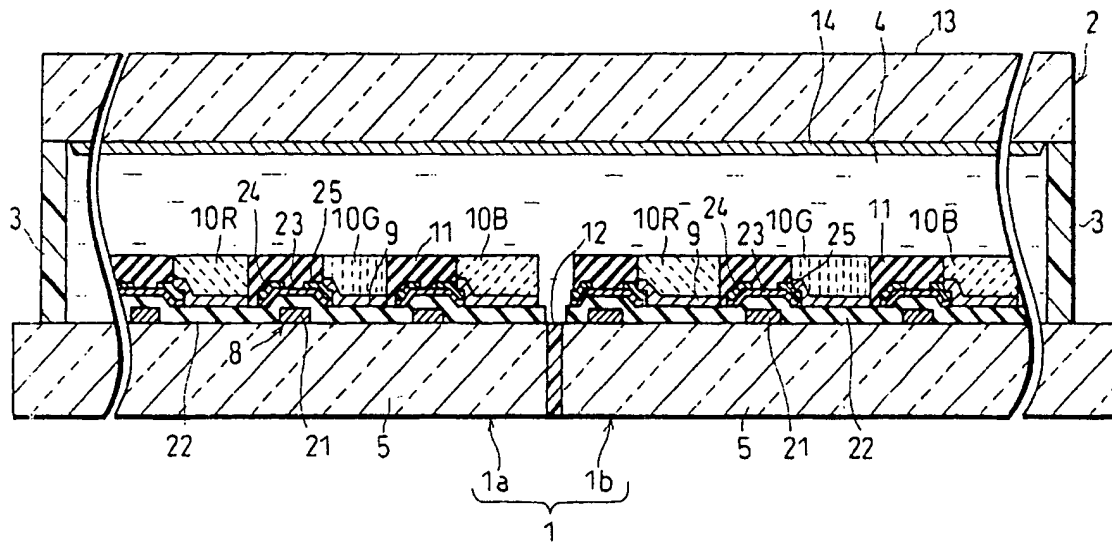
Claims 1, 2, 4, 7-15, 17, 19-22, 25 and 26 are rejected under 35 U.S.C. 102(e) as being anticipated by Izumi (U.S. Patent 6,417,898). Applicants traverse.

The present invention pertains to a novel liquid crystal display device that has a color filter formed by ink-jet printing. The present invention is typified by claim 1, which recites:

1. A liquid crystal display device, comprising:
 - a first substrate;
 - a plurality of gate lines formed on said first substrate;
 - a plurality of data lines, electrically insulated from said plurality of gate lines, formed on said first substrate such that said plurality of data lines intersect with said plurality of gate lines to define cell areas;
 - a pixel electrode formed in each of said cell areas;
 - a transistor associated with each pixel electrode, said transistor having a gate, source and drain, said drain connected to said pixel electrode, said source connected to one of said plurality of data lines, and said gate connected to one of said plurality of gate lines;
 - barrier ribs formed on said source and drain of each transistor;
 - an ink-jet color filter formed in each cell area between said barrier ribs; and
 - a protective layer formed in a portion of each cell area, wherein
 - said ink-jet color filter formed in each cell area is formed on said protective layer.

Izumi pertains to a liquid crystal display device. The Examiner relies upon Figure 1 of Izumi, which is reproduced below.

FIG.1



Izumi at column 4, lines 50-58 describes Fig. 1:

As illustrated in the cross section of FIG. 1, the TFT 8 includes a gate electrode 21 formed on the transparent substrate 5, a gate insulating film 22 formed over the substantially entire surface of the gate electrode 21, a semiconducting layer 23 formed on the gate insulating film 22, and a source electrode 24 and a drain electrode 25 formed on the semiconducting layer 23. For example, the gate insulating film 22 is formed by SiN, and the semiconducting layer 23 is made of a-Si:H.

Izumi fails to disclose or suggest a protective layer.

In the Office Action, the Examiner asserts that the gate insulating film 22 acts as a protective layer, and the color filter is formed over the gate insulating film.

However, the present invention has a color filter located directly on the protective layer, and the pixel electrode is formed on the color filter.

That is, the present invention has a protective layer that is located between the color filter and the insulating film, and the pixel electrode is formed on the color filter.

In contrast, Izumi has the pixel electrode being formed over the gate insulating film.

Additionally, the present invention has barrier lines that are formed in a single direction over a substrate. See claims 10 and 26. Izumi fails to teach or suggest barrier lines in a single direction over the substrate.

As a result, Izumi clearly fails to anticipate the invention as is embodied in any one of independent claims 1, 10, 25 or 26. Claims dependent upon any of these independent claims are patentable for at least the above reasons.

This rejection is accordingly overcome and withdrawal thereof is respectfully requested.

Allowable Subject Matter

The Examiner has allowed claims 23 and 24. The Examiner has indicated that claims 3, 16 and 18 contain allowable subject matter.

The Drawings

The Examiner is respectfully requested to indicate whether the drawing figures are acceptable in the next official action.

Priority

The Examiner has acknowledged foreign priority most recently in the Office Action of September 12, 2003.

Conclusion

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Robert E. Goozner (Reg. No. 42,593) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

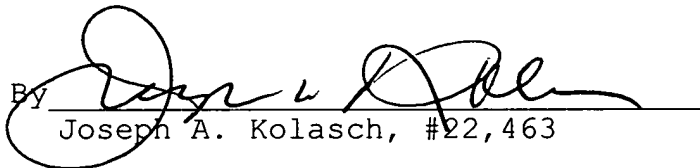
Reply of Dec. 10, 2003
Response to Office Action of Sept. 10. 2003


Appl. No. 09/492,802

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

By 
Joseph A. Kolasch, #22,463


JAK/REG:trb/jls
2658-0183P

P.O. Box 747
Falls Church, VA 22040-0747
(703) 205-8000

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